



# UNITED STATES PATENT AND TRADEMARK OFFICE

Sn  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,580	05/04/2001	Ryan A. Reeder	8266-0519	9710
7590	03/28/2005		EXAMINER	
Intellectual Property Group Bose McKinney & Evans LLP 2700 First Indiana Plaza 135 North Pennsylvania Street Indianapolis, IN 46204			LEE, BENJAMIN C	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/849,580	REEDER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Benjamin C. Lee	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 October 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-101 is/are pending in the application.
- 4a) Of the above claim(s) 16-33,59-68 and 81-101 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15, 34-58 and 69-80 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**Response To Amendment**

1. **Claims 1-15, 34-58 and 69-80** are actively pending; claims 16-33, 59-68 and 81-101 are in withdrawn status.

***Claim Rejections - 35 USC § 102***

2. **Amended claims 39-43, 45 and 49** are rejected under 35 U.S.C. 102(b) as being anticipated by Kelly et al. (WO94/13198).

1) In considering claim 39:

-- Kelly et al. discloses a computer system coupled to a patient OR bed upon which the patient rests OR with which the patient is associated to travel with the patient (Fig. 1A; page 8, line 13 to page 9, line 33), the system comprising: an independently operable computer (102 having inputs, processing, memory, outputs/display and other computer capabilities, whereby computer 102 is independently operable when not docked to the docking station 110 and able to travel with the patient according to page 9, lines 11-31); a plurality of devices for sensing various physical conditions and characteristics of the patient (150-158), each device having an output coupled to the computer (Fig. 1A), and a display screen (104) arranged to present information related to the patient (page 13, lines 29-30; page 24, line 7 to page 25, line 34; page 27, line 6 to line 29).

2) In considering claims 40-43, 45 and 49, Kelly et al. met all of the claimed subject matter as in claim 39, including:

a) the claimed input devices for inputting data and instructions concerning the patient (150-158; page 31, lines 16-18);

- b) the claimed configured to store and retrieve data concerning the patient and the sensing devices and to display such data over a period of time to show relationships on a time basis (storage 106 and corresponding disclosure; display 104 in Fig. 1A showing a time-based relationship display);
- c) the claimed memory in which the patient's history is stored for retrieval and display (106; page 8, lines 5-10; page 17, lines 1-34 and Fig. 7);
- d) the claimed heart rate sensors, respiratory rate sensors, and temperature sensors (page 24, lines 10-12 and page 24, lines 8-10 & 30-34);
- e) the claimed communication network providing for remote monitoring of patient data and remote inputting of data and instructions (page 30, line 15-29; page 31, lines 12-24 and Fig. 7);
- f) the claimed patient status and condition is stored and used for a time-based presentation on the display (Fig. 1A).

***Claim Rejections - 35 USC § 103***

3. **Claims 47-48 and 50-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al.

1) In considering claims 47-48, Kelly et al. met all of the claimed subject matter as in amended claim 39, except:

--the claimed ultrasound image input and x-ray image input to the computer.

Kelly et al. teaches using EKG, blood pressure, pulse, temperature, EEG, neonatal EKG (158) or other physiological parameter sensors to monitor a patient (page 24, lines 10-11). Since

ultrasound and x-ray imaging are known for providing patient physiological condition information, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that they can be included in a patient monitoring system such as taught by Kelly et al. as additional inputs for a more comprehensive monitoring procedure.

2) In considering claim 50:

a) Kelly et al. discloses a system for monitoring patient information, comprising a processor (202) coupled to a memory (106), a user interface coupled to the processor to permit a caregiver to input instructions into the system (page 31, lines 15-18 and Fig. 1A); a display screen (104) coupled to the processor; a power source (166) coupled to the processor; and a connector module (Fig. 1A) configured to couple the system to a medical device including a physiological monitor (150-158), the medical device using the processor, the power supply, and the display of the system to operate the medical device, thereby reducing redundant components in the medical device (Fig. 1A);

except:

b) the claimed medical device using said user interface.

Kelly et al. teaches use of a user interface (keyboard, etc.) connected to the patient monitor (102) through docking station 110 inherently for caretaker to input control for the control of the patient monitor including the medical device, whereby the patient monitor is connected to medical device (150-158), without specifying whether such user interface control controls the medical device directly, or simply controls the processing of the signals from the medical device on the patient monitor. However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that user interface control in a system such as

taught by Kelly et al. can be implemented with direct medical device control so as to allow on/off, calibration and other control of the medical device by a user for improved level of control and thus the usefulness of the system.

3) In considering claims 51-52, Kelly et al. made obvious all of the claimed subject matter as in claim 50, including:

--the claimed vital signs monitor (150-158); wherein the user interface includes a voice recognition user interface (page 31, line 17).

4) In considering claim 53, Kelly et al. made obvious all of the claimed subject matter as in claim 50, except:

--the claimed wherein the user interface is a graphical user interface.

However, since Kelly et al. teaches user interface that can include a voice recognition user interface and keyboard (page 31, lines 15- 17), it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various user interface known in the art, such as a graphical user interface, can be used based on user preference.

5) In considering claim 54, Kelly et al. made obvious all of the claimed subject matter as in claim 50, including:

--the claimed plurality of medical devices (150-158) coupled to the computer system; the computer monitoring output signals from them on a real time basis to provide a time-based presentation of patient information on the display screen (Fig. 1A).

4. **Claims 1-6, 9, 15, 44, 46, and 55-58** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. (US pat. #5,544,649).

1) In considering claim 1:

a) Kelly et al. discloses a patient monitoring system comprising: an independently operable computer configured to travel with a patient (monitor 102 having input, output, display, processing, memory and other computer capabilities, and is independently operable when not docked to the docking station 110 and configured to travel with the patient according to page 9, lines 11-31); an input device (150-158) coupled to the computer and configured to input patient information; a display screen (104) coupled to the computer for displaying patient information (page 13, lines 29-30; page 24, line 7 to page 25, line 34; page 27, line 6 to line 29);

except:

b) the claimed first and second display screens coupled to the computer for displaying a first portion of the patient information on the first display screen and a second portion of the patient information on the second display screen.

In the same art of patient physiological or vital signs monitoring display, David et al. teaches the use of separate display screens so that separate patient monitored parameters can be simultaneously displayed for simultaneous perception (Fig. 5 and col. 13, lines 44-54).

Since the system of Kelly et al. monitors and displays a plurality of patient parameters (e.g. EKG, blood pressure, pulse, temperature, EEG, oximetric data, respiration waveforms and other physiological parameters according to page 24, lines 7-11 and page 25, lines 5-31), in view of the teachings of Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use at a plurality of display screens for the plurality of portions of patient information such as taught by David et al. in a multiple-patient-parameter display system such as taught by Kelly et al. so that at least some (e.g. first and second) portions of the patient information can be displayed on respective (e.g. first and second)

plurality of display screens for simultaneous display for better perception and comprehension by the user.

2) In considering claim 2, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, wherein:

The display of the system of Kelly et al. and David et al. displays patient vital signals over time (104 of Kelly et al. and 78 & 80 of David et al.), while David et al. also teaches monitoring and displaying patient vital signs at predetermined times over a predetermined period of time (col. 8, lines 52-67). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to monitor and display patient vital signs taken at predetermined times over predetermined period of time in a system such as taught by Kelly et al. and David et al. to prevent information overload for the system as well as the user. Furthermore, since convention vital sign and other patient information are presented in the form of a patient chart, such patient information can be displayed on a patient chart to conform to the preference of a variety of users who are generally familiar with patient charts to facilitate user friendliness.

3) In considering claim 3, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wherein the input device includes a physiological monitor (150-158 of Kelly et al.) or wireless data receiver (page 6, lines 24-28 of Kelly et al.; Fig. 7 of David et al.)

4) In considering claim 4, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 3, including:

--the claimed wherein the physiological monitor includes a heart rate monitor, a temperature sensor, a blood oxygen level monitor or an EKG monitor (page 24, lines 10-11; page

25, 8-10 and 18-31 of Kelly et al.; display parameters on displays 78, 82 & 154 that include cardiac activity, oximetric data and ECG data of David et al.)

5) In considering claim 5, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 3, including:

--the claimed manual input device in the form of a keyboard, voice recognition input device, or a barcode reader (page 31, lines 14-17 of Kelly et al.)

6) In considering claim 6, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed physiological monitor coupled to the computer to provide a real time data input for storing and displaying (page 25, line 8 of Kelly et al.)

7) In considering claim 9, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed third display coupled to the computer for display of the patient information (3 displays 78, 82 and 154 of David et al.)

8) In considering claim 15, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

-- the claimed said computer is coupled to a communication network to transmit and receive patient information to/from a remote location (page 30, lines 21-30 and page 31, lines 11-24 of Kelly et al.)

9) In considering claim 44, Kelly et al. met all of the claimed subject matter as in claim 39, except:

--the claimed means for inputting fluid, electrolyte and nutrition data into the memory on a time basis.

In the same patient monitoring art, David et al. teaches the monitoring of patient fluid and food intakes (col. 20, lines 47-51) in addition to monitoring patient physiological conditions (Fig. 5). In view of the teachings by Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the monitoring and storage of patient physiological conditions in a system such as taught by Kelly et al. can be complemented by fluid and food intake such as taught by David et al., such as fluid, electrolyte and nutrition data as specific examples of fluid and food intake, to provide a more comprehensive monitoring of the patient.

10) In considering claim 46, Kelly et al. met all of the claimed subject matter as in claim 39, except:

--the claimed video imaging input to the computer to provide images of the patient.

In the same patient monitoring art, David et al. teaches the monitoring of patient using video imaging input in addition to monitoring patient physiological conditions (Fig. 5). In view of the teachings by Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the monitoring of patient conditions in a system such as taught by Kelly et al. can be complemented video imaging such as taught by David et al. to provide a more comprehensive monitoring of the patient.

11) In considering claims 55-56, Kelly et al. made obvious all of the claimed subject matter as in the consideration of claims 50 and 43, plus the consideration of claim 1 in view of David et al., wherein:

the claimed *simultaneously* displaying at least two indicators related to at least two of a heart rate signal, respiratory rate, fluid/electrolyte/nutrition information, temperature, neurological monitoring, and blood pressure is met by the consideration of claim 1 above.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use multiple display windows on a single display screen instead of multiple display screens as an integrated alternative for providing the same simultaneous multiple-indicator display function in Kelly et al. and David et al. for a tidier look.

12) In considering claims 57-58, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 55, including:

--the claimed at least four or five indicators are displayed (page 24, lines 10-11; page 25, lines 8-34 and Fig. 1A of Kelly et al.).

5. **Claims 69-80** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Phillips et al. (US pat. #5,857,685).

1) In considering claims 69-80, Kelly et al. and Davis et al. made obvious all of the claimed subject matter as in the consideration of claims 1-6, including:

a) battery (166 of Kelly et al.) coupled to computer (102 of Kelly et al.);

While Kelly et al further teaches that the computer (102) is portable and detachably coupled to docking station (110) which provides power to recharge battery 166 (page 9, lines 33-35), and that the docking station (110) may be positioned on an intravenous pole (page 9, lines 11-15), Phillips et al. teaches an intravenous pole support that can be in the form of a walker having a base with casters and a support coupled to the base, and a handle coupled to the support,

with multiple IV poles for supporting multiple IV units (Figs. 1-2) and having electrical power supply (col. 3, lines 47-50).

In view of the teachings by Kelly et al., David et al. and Phillips et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the docking station and portable computer patient monitoring apparatus such as taught by Kelly et al. and David et al. can be amounted to an IV pole support structure in the form of a walker with integrated IV poles such as taught by Phillips et al. as a specific implementation using a movable arm having a first end coupled to the walker and a second end coupled to the display to allow position adjustment of the display without unexpected result. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to provide electrical isolation between the respective power supplies of the monitor and the walker using a well known isolation transformer to prevent shock and equipment damage.

6. **Claims 7-8 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Helot (US pat. #6,309,230).

1) In considering claims 7-8, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed said first and second displays are coupled to a base, and wherein the second display, the input device, and the computer are removable from the base as a separate module for transport with the patient.

Kelly et al. teaches that the portable monitor (102) having input devices (150-158) and display (104) is electrically and mechanically coupled to base (docking station 110), whereby the base is further electrically coupled to another bedside display (120, 122) which may be a slave

display or a full function display (page 10, lines 4-11), and that the portable monitor (102) is detachable from the base as a separate module for transport with the patient (page 9, lines 11-31).

Helot teaches a known docking station or base that allows detachable connection of a plurality of computers having respective displays that allow data interchange and synchronization (12, 14 of Fig. 1 and Abstract).

In view of the teachings by Kelly et al., David et al. and Helot, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a known docking station such as taught by Helot can be used in place of the docking station in a system such as taught by Kelly et al. and David et al. to allow either the bedside display to be both electrically and mechanically coupled to the docking station to form a single modular piece of equipment to save space around the patient, or to allow the use of plural modular/detachable display devices at the portable monitor, as ways to implement the simultaneous display of first and second portions of patient information as taught by Davis et al. while allowing selective portability for transport with the patient by the user.

2) In considering claim 10, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 9, plus the consideration of claim 8 further in view of Helot (see also col. 2, lines 41-45 of Helot for more than two computer devices with displays and inputs).

7. **Claims 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Kikinis (US pat. #5,841,424).

1) In considering claims 11-12 and 14, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said first display screen is larger than the second display screen, wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other, wherein the smaller second display, the input device, and the computer are removable from the first larger display screen as a separate module for transport with the patient.

However, David et al. shows the use of a first display screen (80 or 82 of Fig. 4) that is larger than a second display screen (78 of Fig. 4) in the display of respective patient vital signs parameters, while Kelly et al. teaches the coupling of the portable computer (102) having input devices to a docking station (110) so that the portable computer can be removed from the docking station and transported with the patient (page 9, lines 12-31), and Kikinis teaches a known docking station that can accommodate multiple diverse computing devices each having respective displays (Abstract; Figs. 1 & 4). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that multiple displays for displaying plural patient vital sign parameters in a system such as taught by Kelly et al. and David et al. can be implemented by insertion or including of a first larger display screen and the modular portable computer (includes input device, computer and smaller second display) both coupled to a docking station (base) of a known configuration such as taught by Kikinis to allow simultaneous display of the plural parameters as taught by David et al. while still allowing the modular removal of the portable monitor for transport with the patient as taught by Kelly et al. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the dimension of the first and second displays in a system such as taught by Kelly et al., David et al. and Kikini can be designed so that their top edges are aligned with

each other when coupled to the base (docking station) as a way to present an aesthetic appearance as a user preference.

2) In considering claim 13, Kelly et al., David et al and Kikini made obvious all of the claimed subject matter as in claim 12, except:

--specifying the claimed wherein a portion of the larger first display screen adjacent a bottom edge of the first display screen provides a region for at least one of a menu display area, a pen-based input device, and a touch screen input device.

However, Since Kelly et al. teaches the display of a plurality of patient information and the use of input devices including keyboards, pointing devices, and voice input for interacting with the system (page 31, lines 16-17) while David et al. teaches the use of keyboard 76 for interacting with the system (Fig. 5) and Kikini teaches the use of input devices (inherent on PDA 37) located proximate a bottom edge of the display screen for the same purpose, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various known input devices, including at least one of a menu display area, a pen-based input device, and a touch screen input device, can be implemented at the main display screen such as the first display screen at its bottom edge region as alternative or auxiliary input devices in a system such as taught by Kelly et al., David et al and Kikini without unexpected results.

8. **Claims 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Wilk (US pat. #6,643,124).

1) In considering claims 11-12, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed said first display screen is larger than the second display screen, wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other.

However, Wilk teaches a known foldable multiple display configuration suitable for patient vital signs display (col. 9, lines 56-61) with a first display screen (74) that is larger than a second display screen (64, 66), wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other (Fig. 3). In view of the teachings y Kelly et al., David et al. and Wilk, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a known foldable multiple display configuration such as taught by Wilk can be used to implement the portable multiple displays of system such as taught by Kelly et al. and David et al. to enable compact storage and portable procedures.

2) In considering claim 13, Kelly et al., David et al and Wilk made obvious all of the claimed subject matter as in claim 12, except:

--specifying the claimed wherein a portion of the larger first display screen adjacent a bottom edge of the first display screen provides a region for at least one of a menu display area, a pen-based input device, and a touch screen input device.

However, Since Kelly et al. teaches the display of a plurality of patient information and the use of input devices including keyboards, pointing devices, and voice input for interacting with the system (page 31, lines 16-17) while David et al. teaches the use of keyboard 76 for interacting with the system (Fig. 5) and Wilk teaches the use of keyboard 58 and trackball 60 located proximate a bottom edge of the first display screen for the same purpose, it would have

been obvious to one of ordinary skill in the art at the time of the claimed invention that various known input devices, including at least one of a menu display area, a pen-based input device, and a touch screen input device, can be implemented at the main display screen such as the first display screen at its bottom edge region as alternative or auxiliary input devices in a system such as taught by Kelly et al., David et al and Wilk without unexpected results.

9. **Claims 34-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagy (US pat. #5,291,894) in view of Metz et al. (US pat. #6,585,206).

1) In considering claim 34, Nagy disclosed:

a) the claimed system comprising: means for monitoring at least one physiological condition (6, 8, 10, 12) of a patient on a real time basis (col. 3, lines 5-56); mans for recording information related to a treatment of a patient and the time that the treatment was given to the patient (col. 4, lines 30-42); and means for determining an effectiveness indicator of the treatment of the patient by further monitoring the physiological conditions on a real time basis after the treatment (col. 1, lines 46-48; col. 3, line 67 to col. 4, line 7; col. 4, lines 13-18 and 42-45);

except:

b) specifying the claimed means for determining the effectiveness of treatment, and means for supporting the patient so that the monitoring, recording and determining means are being coupled to the means for supporting the patient.

Since Nagy teaches using a microprocessor to measure the difference or “change” in the patient’s physiological conditions by comparison the parameters before and after treatment, and that the medical attendant can determine the effectiveness of treatment based on these “measured

change", it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such measured difference/change constitutes a treatment effectiveness indicator in a system such as taught by Nagy. Furthermore, since the criteria for defining effectiveness, the measured differences, and the use of microprocessor have already been taught by Nagy, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to translate the treatment effectiveness indicator into a treatment effectiveness measurement by the microprocessor such that the result constitutes a means for determining treatment effectiveness, so that the medical attendant can observe the effectiveness result without having to infer the effectiveness from the measured difference to save time for the attendant and reduce likelihood of human error.

Furthermore, Metz et al. teaches a medical accessory support for supporting a patient and equipment used on the patient including control units, computer equipment, monitor screens, etc. (col. 2, lines 64 to col. 3, line 3). Since the system of Nagy is used for a patient, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize a medical accessory and patient support as taught by Metz et al. for supporting the patient and the system equipment in Nagy to facilitate application of the system function on the patient.

2) In considering claim 35, Nagy and Metz et al. made obvious all of the claimed subject matter as in claim 34, including:

--the claimed therapy device treatment (col. 1, line 19 of Nagy).

3) In considering claim 36, Nagy and Metz et al. made obvious all of the claimed subject matter as in claim 34, including:

a) the claimed vibration treatment therapy (col. 1 line 12 of Nagy);

b) specifying that the therapy is performed by a patient support surface (Fig. 1 of Metz et al.)

4) In considering claim 37, Nagy and Metz et al. made obvious all of the claimed subject matter as in claim 34, including:

--the claimed said treatment is a therapy device performing therapy on the patient (col. 1, line 19), the system including a computer for monitoring the amount of time that the therapy is performed (see Figure and col. 3, lines 6-8 of Nagy).

5) In considering claim 38, Nagy and Metz et al. made obvious all of the claimed subject matter as in claim 34, including:

--the claimed computer coupled to a display screen for displaying physiological conditions of the patient on a real time basis and also displaying the times that the treatments occur on the display screen so that a caregiver can monitor the effectiveness of the treatments (see Figure; col. 3, lines 29-38 and col. 4, lines 30-31 of Nagy).

#### *Response to Arguments*

10. Applicant's arguments filed 10/12/04 have been fully considered but they are not persuasive.

1) Contrary to Applicant's allegation, computer 102 of Kelly is, independently operable, portable and travels with the patient as indicated in the above rejection, which cited specific pages and lines in the Kelly specification for support.

2) The data acquisition modules/sensors of Kelly provide unprocessed data acquisition function inputs to the monitor computer 1-2 for processing, output and display by the monitor

102 (see page 24, lines 26-36), and depend on monitor 102 for power, since battery 166 is connected to the monitor 102 while such data acquisition modules/sensors are connected to the monitor 102 but not to the battery directly (see Fig. 1A and corresponding disclosure of Kelly.)

3) The amended feature of “simultaneously displaying at least 2 indicators on the display screen” of amended claim 55 has been rejected under new ground of rejection, i.e. using additional reference of David et al. See above rejection for full detail.

4) The amended feature of “independently operable computer configured to travel with patient” of amended claim 1 has been addressed using Kelly in the above rejection.

5) Regarding claim 69, handle 28 attached to wheeled cart in Fig. 1 of Phillips et al. allows a patient to walk with it and depend on it for physical support while walking, thereby constituting the claimed walker. Furthermore, rotatable/movable support arm for a display monitor to allow viewing angle adjustment is well known in the art and obvious in the combination of Kelly et al. in view of David et al. and Phillips et al. as indicated in the rejection.

6) Regarding amended claim 34, first-time used reference of Metz et al. (previously cited) has been used to address the “patient support means to which the monitoring, recording, and determining means are coupled” under new ground of rejection. See above rejection for full detail.

7) In conclusion, the rejection fully addressed every claimed limitation, the prior art as used in the rejection fully render all of the claimed subject matter obvious, and Applicant’s arguments are not deemed persuasive in overcoming the rejection.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin Q. Lee  
Primary Examiner  
Art Unit 2632

B.L.  
3/19/05